



BPC AS4 Profile Version 1.0

January 4, 2022



Business Payments Coalition

Table of Contents

1	Version History.....	3
2	Introduction.....	3
2.1	Scope	3
2.2	Conformance.....	3
2.3	Terms and Definitions.....	3
2.4	Disclaimers and Copyright.....	3
3	BPC PMode Parameters.....	4
3.1	General	4
3.2	BPC specific PMode parameters and configurations	4
3.2.1	PMode.Agreement.....	4
3.2.2	PMode[1].ReceptionAwareness.Retry	4
3.2.3	PMode[1].ReceptionAwareness.Retry.Parameters.....	4
3.2.4	PMode[1].ReceptionAwareness.DetectDuplicates.Parameters.....	5
3.2.5	PMode[1].ErrorHandling.Report.MissingReceiptNotifyProducer	5
3.2.6	PMode[1].Security.X509.Encryption.Encrypt.....	5
3.2.7	PMode[1].Security.X509.Encryption.Algorithm.....	5

1 Version History

Revision Date	Version	Change Description	Editor Name
11/22/2021	0.9	Initial import into template	Britta Holland
01/4/2022	1.0	Incorporated IOC comments	Britta Holland

2 Introduction

2.1 Scope

This specification is a profile of the OASIS AS4 Interoperability Profile for Four-Corner Networks Version 1.0 Committee Specification 01 (BDXR AS4) published here:

<https://docs.oasis-open.org/bdxb/bdx-as4/v1.0/cs01/bdx-as4-v1.0-cs01.html>.

AS4 is used in the BPC network for the transmission of asynchronous messages between Access Points (Corners 2 and 3). Together with the BDXR AS4 specification, this document specifies how AS4 is used in the BPC network. All Access Points MUST conform to all normative conformance statements in this document and MUST conform to all conformance clauses in sections 7.1 and 7.3 of the BDXR AS4 specification.

2.2 Conformance

The keywords 'MUST', 'MUST NOT', 'REQUIRED', 'SHALL', 'SHALL NOT', 'SHOULD', 'SHOULD NOT', 'RECOMMENDED', 'MAY', and 'OPTIONAL' in this specification are to be interpreted as described in RFC2119 and RFC 8174 when, and only when, they appear in all capitals, as shown here.

2.3 Terms and Definitions

For the purpose of this specification, all terms shall have the definitions defined in section 2.3 of the E-invoice Exchange Framework – Approach to Managing a Federated Registry Services Model in a Four-Corner Network report found here:

<https://businesspaymentscoalition.org/wp-content/uploads/bpc-e-delivery-network-validation-exercise-2020.pdf>

2.4 Disclaimers and Copyright

Views expressed here are not necessarily those of, and should not be attributed to, any particular BPC participant or organization. They are not intended to provide business or legal advice, nor are they intended to promote or advocate a specific action, payment strategy, or product. Readers should consult with their own business and legal advisors.

This specification is the work product of the BPC, and readers are free to republish this

specification in whole or in part without further permission, as long as the work is attributed to the BPC, and in no way suggests the BPC sponsors, endorses or recommends any organization or its services or products. Other product names and company names referenced within this document may be either trademarks or service marks of their respective owners.

<Add MIT Licensing statement here.>

3 BPC PMode Parameters

3.1 General

An Access Point MUST implement all PMode parameters exactly as specified in the OASIS AS4 Interoperability Profile for Four-Corner Networks Version 1.0 Committee Specification 01 (BDXR AS4) as published here: <https://docs.oasis-open.org/bdxr/bdx-as4/v1.0/cs01/bdx-as4-v1.0-cs01.html>.

PMode parameters and network policies specific to the BPC are specified in this document and MUST be implemented exactly as specified in section 3.2 below.

3.2 BPC specific PMode parameters and configurations

3.2.1 PMode.Agreement

Parameter	PMode.Agreement
Type	Constant
Description and usage	Uniquely identifies that the message exchange is governed by the BPC network agreements and policies.
Value	<code>http://bpcpilot.change.me/tempagreement.html</code>

3.2.2 PMode[1].ReceptionAwareness.Retry

Parameter	PMode[1].ReceptionAwareness.Retry
Type	Constant
Description and usage	Specifies that Access Points in the BPC network MUST retry sending messages if the first attempt(s) failed.
Value	<code>True</code>

3.2.3 PMode[1].ReceptionAwareness.Retry.Parameters

Parameter	PMode[1].ReceptionAwareness.Retry.Parameters
Type	Constant
Description and usage	Specifies the parameters and requirements when retrying sending a message in the BPC network
Value	<i>Access points must retry at least five times over six hours with no fewer than 15 seconds between attempts, and shall not continue retrying for longer than twelve hours, at which point they should throw a missing receipt error as specified in the AS4 Profile of ebMS 3.0 Version 1.0 specification.</i>

3.2.4 PMode[1].ReceptionAwareness.DetectDuplicates.Parameters

Parameter	PMode[1].ReceptionAwareness.DetectDuplicates.Parameters
Type	Constant
Description and usage	Specifies the parameters and requirements for detecting and handling duplicate messages in the BPC network
Value	<i>A receiving Access Point MUST detect if a received message is a duplicate of a message already received within 30 days.</i>

3.2.5 PMode[1].ErrorHandling.Report.MissingReceiptNotifyProducer

Parameter	PMode[1].ErrorHandling.Report.MissingReceiptNotifyProducer
Type	Constant
Description and usage	Specifies that a sending Access Point in the BPC network MUST notify the calling application in case of permanent message delivery failure.
Value	True

3.2.6 PMode[1].Security.X509.Encryption.Encrypt

Parameter	PMode[1].Security.X509.Encryption.Encrypt
Type	Constant
Description and usage	Specifies whether to encrypt AS4 messages in the BPC network
Value	True

3.2.7 PMode[1].Security.X509.Encryption.Algorithm

Parameter	PMode[1].Security.X509.Encryption.Algorithm
Type	Constant
Description and usage	Specifies the encryption algorithm used for AS4 message encryption in the BPC network. Only AES-256 with GCM mode is allowed in the BPC network.
Value	http://www.w3.org/2009/xmlenc11#aes256-gcm